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(54) Title: RNA VIRUS-DERIVED PLANT EXPRESSION SYSTEM

(57) Abstract: A process of expressing a sequence of interest in a plant, plant part, or plant cell culture, comprising: (a) providing a plant, plant part, or plant cell culture containing in cell nuclei a heterologous DNA having a sequence encoding an RNA replicon operably linked or linkable to a transcription promoter, wherein said sequence encoding an RNA replicon contains (i) sequences for replicon function of said RNA replicon, said sequences being derived from a sequence of a plant RNA virus, (ii) a sequence of interest, whereby said sequences for replicon function exhibit at selected localities of said sequences of said plant RNA virus function conservative differences from said sequence of said plant RNA virus, said differences causing an increased frequency of replicon formation compared to an RNA replicon not exhibiting said differences; and (b) causing expression of said sequence of interest.